Annonay, contain an interesting account of a visit he made to England in 1825, the year of the opening of the Stockton and Darlington Railway. Seguin met Brunel, Maudslay, Babbage, Stephenson, and Brewster, and travelled to Leeds, Newcastle, Edinburgh, and Liverpool. He himself was concerned at that time with a project for steam navigation on the Rhone, and the main object of his visit was to obtain engines. He saw, however, a good deal of the early mine railroads of England, while his account of the Stockton and Darlington railway is of great historical value. Sequin was connected with the St. Etienne-Lyon Railway and was an independent inventor of the tubular boiler.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant for technical records work at the Building Research Station of the Department of Scientific and Industrial Research—The Director, Building Research Station, Garston, near Watford, Herts (Mar. 21). A laboratory assistant at the Chemical Research Laboratory, Teddington—The Secretary, Department of Scientific and Industrial Research, 16 Old Queen Street, S.W.1 (Mar. 21). A lecturer in the chemical and metallurgical department of the Wolverhampton and Staffordshire Technical College, and a lecturer in engineering subjects at the same institution—The Clerk to the Governors, North Street, Wolverhampton (Mar. 25). Lecturers in the spinning and weaving departments of Keighley Technical College—The Secretary, Education Offices, Keighley (Mar. 26). An assistant curator of the Leeds City Museum—The Town Clerk, 26 Great George Street, Leeds (Mar. 28). Professors of mathematics, and education and psychology at Raffles College, Singapore—The Secretary, Board of Education, Whitehall, S.W.1 (Mar. 28). An assistant in the department of archæology, Free Public Museums, Liverpool—Dr. J. J. Simpson, Free Public Museums, Liverpool (April 2). A woman professor of physiology at the Lady Hardinge Medical College, Delhi—The Honorary Secretary, U.K. Branch Dufferin Fund, c/o Major-General J. B. Smith, India Office, Whitehall, S.W.1 (April 19). A graduate for engineering subjects and mathematics at the Workington County Technical and Secondary School—The Principal.

Our Astronomical Column.

RETURN OF THE COMET PONS-WINNECKE.—This comet was detected by Prof. G. von Biesbroeck at Yerkes on Mar. 3^d 10^h $19 \cdot 5^m$ U.T., in R.A. 14^h 12^m $20 \cdot 4^s$, N. Decl. 25° 45′ 24″ (1927·0), magnitude 16·0. With the aid of this observation, and using the following elements, which are those of Mr. C. J. Merfield slightly modified, Dr. A. C. D. Crommelin has calculated the following ephemeris:

$$T = 1927 \text{ June } 21 \cdot 1564 \text{ U.T.}$$
$$\left. \begin{array}{l} \omega = 170° \ 22′ \ 50″ \\ \Omega = \ 98 \ \ 10 \ \ \ 0 \\ i = \ \ 18 \ \ 57 \ \ \ 0 \end{array} \right\} 1927 \cdot 0$$
$$\log q = 0 \cdot 016840$$
$$e = 0 \cdot 685516$$
$$\text{Period} = 6 \cdot 00983 \text{ years}$$

EPHEMERIS FOR 0^h U.T.

	R.A.			N. Decl.		$\log r.$	$\log \triangle.$
Mar. 13.	14^h	23^m	23^s	29°	5′		9·9410
17.	14	27	37	30	36	0·2106	9·9173
21.	14	31	34	32	11		9·8938
25.	14	35	23	33	49	0·1914	9·8703
29.	14	38	47	35	30		9·8467

T is 0·6 days later than Mr. Merfield's prediction.

The comet will make a very close approach to the earth in June, being at its nearest (3·6 million miles) about 0^h on June 27. Its parallax will then be 227″, and it will be well placed for observation, being on the meridian at 3^h A.M. in North Decl. 6°. Its daily motion will then be 11°·7, which is just equal to that of the moon in apogee. It should be readily visible to the naked eye, but may be rather difficult to observe for position in the telescope, as it will fill most of the field. The presence of a stellar nucleus is not very probable, but if there should be one, the occasion should be utilised for deducing the solar parallax.

THE FIREBALL OF FEB. 25.—Mr. W. F. Denning writes : " The observations of this brilliant object, though for the most part incomplete in scientific details, yet include some excellent descriptions and enable the real path to be determined with satisfactory accuracy. Seventy-four accounts were received, ranging from Leicester in the north of England, Sandwich on the east, Portland in the south, and Plymouth and Penzance on the south-east. That the object detonated rests on the testimony of about half of the observers.

" The radiant point was in Leo at 144° + 6° and the height of the meteor was 65 to 27 miles, path 54 miles, velocity 18 miles per second. These results are slightly different from those derived from the preliminary investigation.—The path was over Devon from about Kingsbridge to north of Dawlish. This shower from near o Leonis is visible from November until February. At any rate radiation is maintained from apparently the same point.

" The fireball was chiefly remarkable for the vividness of its intensely white light and for its double outburst. Many large meteors display very long paths from radiants near the horizon, but this object was comparatively near to its point of emanation."

THE ORBIT OF 61 CYGNI.—This double star has always excited great interest, since it was the first to have its parallax determined by Bessel. The duplicity was discovered by Bradley in 1753, and measures were obtained by Ch. Mayer, Sir W. Herschel, and later by Bessel. The latter ventured to assign the period of 460 years, but in the course of time it became clear that this period was considerably too short. Not a few astronomers (among them C. Flammarion and Burnham) questioned the orbital nature of the motion, and considered that it could be represented by a straight line. But Mr. T. Lewis, in his memoir on the Struve double stars, gave a large diagram which made the curvature palpable and obvious. P. Baize contributes an interesting article to L'Astronomie for January, into which he brings Mr. Lewis's diagram, with the addition of twenty more years of observations which have still further established the curvature. He makes a re-determination of the orbit, reaching results quite close to those given by Peters in 1883 ; the periods found are, Peters 783 years, Baize 756 years, so we may perhaps consider it as known within a century or so. Baize's other elements are : Periastron A.D. 1978, inclination 45°, eccentricity 0·013, semi-major axis 32″·8. Taking the parallax as 0″·28, the mean distance is 117 units, which would give a period of 1266 years if the joint mass was equal to that of the sun. The period 756 years, therefore, indicates a joint mass considerably in excess of that of the sun.